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Amendments to the Specification:

Rewrite the paragraph at page 21, line 17 as follows.

Similarly, the frame synchronization sequence 94 is constructed by successively appending 3 periods, denoted as {FS_0, FS_1, $\underline{FS_2}$ ~~FS_{20}~~}, of ~~an~~ a 180 degree rotated version of the time-domain sequence specified in Table 5. Again, each period of the frame synchronization sequence is constructed by cyclically extending the 128-length sequence (defined in Table 5) by 32 samples and by appending a guard interval of 5 "zero samples". This portion of the preamble can be used to synchronize the receiver algorithm within the preamble.

Rewrite the paragraph at page 28, line 5 as follows.

The tail bit ~~bit~~ field is six bits of "0", which are required to return the convolutional encoder to the "zero state". This procedure improves the error probability of the convolutional decoder, which relies on the future bits when decoding the message stream. The tail bit field following the HCS is produced by replacing six "zero" bits following the end of the HCS with six non-scrambled "zero" bits. Similarly, the tail bit field following the MAC frame body is produced by replacing six "zero" bits following the end of the MAC frame body with six non-scrambled "zero" bits.

Rewrite the paragraph at page 29, line 30 as follows.

Let N_{CBPS}, for example, be the number of coded bits per OFDM symbol. First, the coded bits are grouped together into blocks of $\underline{3\ N_{CBPS}}$ ~~3NCBPS~~ coded bits, which corresponds to three OFDM symbols. Each group of coded bits is then permuted using a regular symbol block interleaver of size N_{CBPS} x 3. Now let the sequences {U(i)} and {S(j)}, where i, j = 0,..., $3N_{CBPS}$-1, represent the input and output bits of the symbol block interleaver, respectively. The input-output relationship of this interleaver is given by:

Rewrite the paragraph at page 32, line 5 as follows.

There are two types of pilot signals defined for the OFDM PHY: standard pilot ~~pilots~~ signals and user-defined pilot ~~pilots~~ signals. The first set of pilot signals (standard pilot signals) must comply as described herein, while the specification of the second set of pilot signals (user-defined pilot signals) is left to the implementer.

Rewrite the paragraph at page 35, line 19 as follows.

The relationship between center frequency and channel number is given by the following equation:

$$\text{Channel center frequency} = 2904 + 528 \times n_{ch} \text{ (MHz)}$$

where n_{ch} ~~n_{ch}~~ = 1,2, ..., 14. This definition provides a unique numbering system for all channels that have a spacing of 528 MHz and lie within the band 3.1 - 10.6 GHz. In the present embodiments, only channels 1 through 3 are considered valid operating channels; the remaining channels are reserved for future growth. Table 12 summarizes the channel allocation.

Rewrite the paragraph at page 46, line 5 as follows.

Certain enhancements to the MAC are necessary to support the PHY. The PHY specification defines certain interleaving sequences (IS) each of which is a repetition of an ordered group of channel indexes 210 such as seen in Figure 21. Each IS is designated by a unique IS number. Given an IS, the OFDM symbols of a PLCP frame, which starts with a PLCP preamble, are transmitted successively on each of the ordered channels, beginning from the first one, as defined for that IS ~~HS~~.

Rewrite the paragraph at page 48, line 15 as follows.

~~Table 1~~ – TFI PHY attributes (new)

Attribute	Length	Definition	Type
PHYPIB_CurrentIS	1 octet	The interleaving sequence to be used by this DEV for the current superframe	Dynamic
PHYPIB_CurrentRS	1 octet	The rotation sequence to be used by this DEV in determining interleaving sequences for subsequent superframes	Dynamic

Rewrite the paragraph at page 63, line 14 as follows.

By selecting the spacing between channels to be integer multiples ~~multiplies~~ of f/16, it possible to generate the frequency for the second stage of mixers 430, 432 by simply passing the carrier frequency through a series of dividers. An advantage of using dividers is that it is now possible to obtain switching times of less than 11.7 ns. Therefore, as also stated herein before, a guard interval of 11.7 ns should be sufficient to allow both the transmitter and receiver to switch between the different channels.